
FOR IMMEDIATE RELEASE

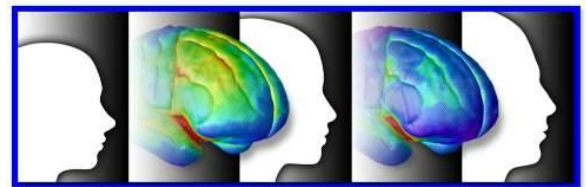
Friday, September 25, 2015
10 a.m. EDT

Contacts: NIDA Press Office
301-443-6245
media@nida.nih.gov

NIAAA Press Office
301-443-3860
NIAAAPressOffice@mail.nih.gov

NIH launches landmark study on substance use and adolescent brain development
Thirteen grants awarded to look at cognitive and social development in ~10,000 children

The National Institutes of Health today awarded 13 grants to research institutions around the country as part of a landmark study about the effects of adolescent substance use on the developing brain. The Adolescent Brain Cognitive Development (ABCD) Study will follow approximately 10,000 children beginning at ages 9 to 10, before they initiate drug use, through the period of highest risk for substance use and other mental health disorders. Scientists will track exposure to substances (including nicotine, alcohol, and marijuana), academic achievement, cognitive skills, mental health, and brain structure and function using advanced research methods.



Adolescent Brain Cognitive Development

“With advances in neuroimaging and other investigative tools, we will be able to look in greater detail at the impact of substance use on young people,” said Nora D. Volkow, M.D., director of NIH’s National Institute on Drug Abuse (NIDA). “Adolescents have access to high potency marijuana and greater varieties of nicotine delivery devices than previous generations. We want to know how that and other trends affect the trajectory of the developing brain.”

“The ABCD Study is an important opportunity to closely examine, in humans, the hypothesized link between adolescent alcohol abuse and long-term harmful effects on brain development and function,” said George Koob, Ph.D., director of NIH’s National Institute on Alcohol Abuse and Alcoholism (NIAAA). “Recent human studies have revealed an acceleration in the typical decline in volume of neocortical areas and smaller increases in white matter volume in adolescents who transitioned to heavy drinking compared to those who did not using magnetic resonance imaging.”

The ABCD Study will seek to address many questions related to substance use and development that will help inform prevention and treatment research priorities, public health strategies, and policy decisions, including:

- What is the impact of occasional versus regular use of marijuana, alcohol, tobacco, and other substances, alone or in combination, on the structure and function of the developing brain?

- How does the use of specific substances impact the risk for using other substances?
- What are the brain pathways that link adolescent substance use and risk for mental illnesses?
- What impact does substance use have on physical health, psychological development, information processing, learning and memory, academic achievement, social development, and other behaviors?
- What factors (such as prenatal exposure, genetics, head trauma, and demographics) influence the development of substance use and its consequences?

The 13 grants issued today (attached) will fund a Coordinating Center, a Data Analysis and Informatics Center, and 11 research project sites. The requests for applications and other information about the ABCD Study, including protection of patient confidentiality and parental consent, can be found at <http://addictionresearch.nih.gov/adolescent-brain-cognitive-development-study>. The ABCD Study was initiated by the [Collaborative Research on Addiction at NIH](#) (CRAN), a consortium of institutes that include a focus on addiction research. CRAN is comprised of [NIDA](#), [NIAAA](#) and the [National Cancer Institute](#). Other NIH collaborators in this project are the [Eunice Kennedy Shriver National Institute of Child Health and Human Development](#), the [National Institute of Mental Health](#), the [National Institute on Minority Health and Health Disparities](#), the [National Institute of Neurological Disorders and Stroke](#); and the [Office of Behavioral and Social Sciences Research](#).

NIDA has a special section on its [website](#) related to the current state of the science on substances and brain health.

###

The National Institute on Drug Abuse (NIDA) is a component of the National Institutes of Health, U.S. Department of Health and Human Services. NIDA supports most of the world's research on the health aspects of drug abuse and addiction. The Institute carries out a large variety of programs to inform policy and improve practice. Fact sheets on the health effects of drugs of abuse and information on NIDA research and other activities can be found at <http://www.drugabuse.gov>, which is now compatible with your smartphone, iPad or tablet. To order publications in English or Spanish, call NIDA's DrugPubs research dissemination center at 1-877-NIDA-NIH or 240-645-0228 (TDD) or email requests to drugpubs@nida.nih.gov. Online ordering is available at <http://drugpubs.drugabuse.gov>. NIDA's media guide can be found at <http://drugabuse.gov/mediaguide/>, and its easy-to-read website can be found at <http://www.easyread.drugabuse.gov>.

The National Institute on Alcohol Abuse and Alcoholism (NIAAA), part of the National Institutes of Health, is the primary U.S. agency for conducting and supporting research on the causes, consequences, prevention, and treatment of alcohol abuse, alcoholism, and alcohol problems. NIAAA funds the [National Consortium on Alcohol and Neurodevelopment in Adolescence](#) (NCANDA) to determine the effects of problematic alcohol use on the developing adolescent brain and examine brain characteristics that predict alcohol use disorder. NIAAA also disseminates research findings to general, professional, and academic audiences. Additional alcohol research information and publications are available at www.niaaa.nih.gov.

About the National Institutes of Health (NIH): NIH, the nation's medical research agency, includes 27 Institutes and Centers and is a component of the U.S. Department of Health and Human Services. NIH is the primary federal agency conducting and supporting basic, clinical, and translational medical research, and is investigating the causes, treatments, and cures for both common and rare diseases. For more information about NIH and its programs, visit www.nih.gov.

ABCD Awardees are listed below:

Coordinating Center:

Terry L. Jernigan, Ph.D., University of California, San Diego

Sandra A. Brown, Ph.D., University of California, San Diego

Data Analysis and Informatics Center:

Anders M. Dale, Ph.D., University of California, San Diego

Research Project Sites:

1. Betty J. Casey, Ph.D., Weill Medical College of Cornell University
Rita Z. Goldstein, Ph.D., Icahn School of Medicine at Mount Sinai
2. Duncan B. Clark, M.D., Ph.D., University of Pittsburgh
3. Ian M. Colrain, Ph.D., SRI International
4. Thomas M. Ernst, Ph.D., University of Hawaii at Manoa
George Fein, Ph.D., Neurobehavioral Research, Inc., Wailuku
Thomas A. Wills, Ph.D., University of Hawaii at Manoa
5. Raul Gonzalez, Ph.D., Florida International University
6. Mary M. Heitzeg, Ph.D., University of Michigan
Linda B. Cottler, Ph.D., M.P.H., University of Florida
Sara Jo Nixon, Ph.D., University of Florida
Robert A. Zucker, Ph.D., A.B.P.P., University of Michigan
7. William G. Iacono, Ph.D., University of Minnesota
Marie T. Banich, Ph.D., University of Colorado
Deanna M. Barch, Ph.D., Washington University, St. Louis
James M. Bjork, Ph.D., Virginia Commonwealth University
Andrew C. Heath, D.Phil. Washington University, St. Louis
Monica M. Luciana, Ph.D., University of Minnesota
Pamela A. Madden, Ph.D., Washington University, St. Louis
Michael C. Neale Ph.D., Virginia Commonwealth University
8. Bonnie J. Nagel, Ph.D., Oregon Health & Science University
Damien A. Fair, Ph.D., PA-C., Oregon Health & Science University
Sarah W. Feldstein Ewing, Ph.D., Oregon Health & Science University
Hugh P. Garavan, Ph.D., University of Vermont
9. Elizabeth R. Sowell, Ph.D., Children's Hospital of Los Angeles
Susan Y. Bookheimer, Ph.D., University of California, Los Angeles
10. Susan F. Tapert, Ph.D., University of California, San Diego
Martin P. Paulus, M.D., Laureate Institute for Brain Research, Tulsa
11. Deborah A. Yurgelun-Todd, Ph.D., University of Utah
Perry F. Renshaw, M.D., Ph.D., University of Utah